



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/581,911	06/19/2000	JAN ERIKSSON	1501-1111	4412
466	7590	09/14/2007		
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER VALENTI, ANDREA M	
			ART UNIT 3643	PAPER NUMBER
			MAIL DATE 09/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/581,911
Filing Date: June 19, 2000
Appellant(s): ERIKSSON, JAN

MAILED

SEP 14 2007

GROUP 3600

Roland E. Long, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 22 June 2007 appealing from the Office action mailed 14 June 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief, DeLaval Holding AB of Tumba, Sweden.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

The Board of Patent Appeals and Interferences rendered Decision on Appeal on 31 March 2005, Appeal No. 2005-0710.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,508,058	Jakobson et al	04-1985
4,613,939	Paine	09-1986
5,754,451	Williams	05-1998
PCT WO 96/36212	Innings et al	11-1996

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The grounds of rejection as set forth in the Final Office Action mailed 14 June 2006 have been maintained.

Claims 1-4, 8-12, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,508,058 to Jakobson et al in view of U.S. Patent No. 4,613,939 to Paine and U.S. Patent No. 5,754,451 to Williams.

Claims 5-7 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,508,058 to Jakobson et al in view of U.S. Patent No. 4,613,939 to Paine and U.S. Patent No. 5,754,451 to Williams as applied to claim 1 and 12 above, and further in view of WO 96/36212 to Innings et al.

(10) Response to Argument

Applicant's claimed invention is merely a known mechanical preventative maintenance measure. The claimed steps and apparatus for registering a cumulative running value for a piece of mechanical equipment, using known circuitry to signal when a predetermined value has been reached, and storing additional cumulative running values are old and notoriously well-known measures. For example, cars have a

Art Unit: 3643

signaling warning light that comes on once the car has traveled a predetermined amount of miles to indicate an oil change or service is necessary. Preventative maintenance measures are an old and notoriously well-known means of reducing unscheduled downtime and catastrophic mechanical failure. The claimed technique and apparatus is an old and notoriously well-known application for mechanical devices. In this instance, applicant is merely applying the known technique to the known mechanical components of a milking system. The modification here is merely the use of a known technique to improve a known alternate mechanical device in the same way to yield predictable results.

Applicant has argued that the present rejection arises from improper application of hindsight.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The Jakobson reference was cited to teach the known mechanical components of an automated milking system. The Jakobson reference was cited as a teaching of general knowledge of one of ordinary skill in the art of animal husbandry of the known

Art Unit: 3643

mechanical components of an automated milking system: robot, robot arm, animal related device, animal related operation, teat location device, driven gate, robot drive means, teat cleaning device. Jakobson was silent on explicitly teaching a teat cup with a shell and liner and a source of vacuum via pulsator. Innings was cited merely to teach the general knowledge of one of ordinary skill in the art of the known teat cup/pulsator milking component that facilitates the collection of milk in an automated milking system. Collectively Jakobson and Innings were merely cited to teach the known automate milking machine mechanical components and structure.

The Paine reference was cited to teach the general knowledge of one of ordinary skill in the art that it is known practice to establish a predetermined threshold value for machinery components, registering the cumulative running value, and signaling when the threshold is reached (Paine abstract; Col. 1 line 7-11, line 23-29, line 50-53; and Col. 2 line 55-60). The examiner maintains that it would have been obvious to one of ordinary skill in the art to modify the known mechanical components of the system of Jakobson and Innings with the preventative maintenance measures of Paine at the time of the invention. The teachings of Paine are not limited to one explicit type of mechanical device, but are applicable to many mechanical devices. Applicant has erroneously overly narrowed both the teachings of Paine (Paine Col. 1 line 23) and Williams (Williams abstract line 1 "for a machine"). The modification is merely the use of a known technique to improve a similar device (i.e. alternate mechanical device) in the same way.

Art Unit: 3643

Paine teaches the general concept of monitoring predetermined threshold value running time for mechanical devices and Williams was cited to teach it is general knowledge of one of ordinary skill to monitor the components of a mechanical system individually in conducting preventative maintenance practices (Williams Col. 2 line 1-10). Therefore, Williams supports that it would have been an obvious modification for one of ordinary skill in the art to monitor separately mechanical components of an automated milking system: robot, robot arm, animal related device, animal related operation, teat location device, driven gate, robot drive means, teat cleaning device. Paine and Williams both satisfy the claim limitation of storing a cumulative running value and adding it to the previously stored value (Williams Col. 4 line 38-54 and fig. 5 #90; microprocessor with memory #20 and #10 and Col. 5 line 25-33; Paine Col. 6 line 15-25; Paine teaches a microprocessor and memory device Col. 5 line 42).

Furthermore, KSR forecloses the argument that a specific teaching, suggestion or motivation is required to support a finding of obviousness. See the recent Board decisions *Ex parte Smith*, --USPQ2d--, slip op. at 20 (Bd. Pat. App. & Interf. June 25, 2007) (citing KSR, 82 USPQ2d at 1396) (available at <http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf>).

Applicant has argued each reference individually and focuses on the deficiencies of each reference individually, but it is the examiner's position that each of these references are representations of a collective general knowledge of one of ordinary skill in the art and collectively satisfy all of the claimed limitations. In summary, Jakobson and Innings teach the known mechanical components of an automated milking system,

Art Unit: 3643

Paine teaches it is known to monitor a mechanical device for preventative maintenance measures and Williams teaches that it is known to monitor each mechanical component individually i.e a cumulative running value for each mechanical device separately, a signal for at least one mechanical device when a predetermined threshold for that device has been reached, and registering further cumulative running values for each mechanical device and storing the data.

Examiner maintains that applicant has not patentably distinguished over the teachings of the cited prior art of record.

(11) Related Proceeding(s) Appendix

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein. Applicant did not provide a copy of the decision in the Appeal Brief Appendix; however, the examiner has attached a copy of the decision to this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Andrea M. Valenti
Primary Examiner
Art Unit 3643

Conferees:

Kurt Rowan



Meredith Petravick



Andrea Valenti



The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAILED

MAR 31 2005

U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAN ERIKSSON

Appeal No. 2005-0710
Application 09/581,911

ON BRIEF

Before FRANKFORT, McQUADE, and BAHR, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 10, all of the claims pending in this application.

As noted on page 1 of the specification, appellant's invention relates to an animal related apparatus, comprising a robot for performing an animal related operation, said robot being associated with a control means, and at least one animal related device associated with said control means, said robot being provided with a robot arm adapted to move the animal related device towards an animal. As disclosed, the animal related device may be a teatcup for milking, or a teat cleaning means, used on an animal at least temporarily constrained in an animal space (4) as shown in Figure 1 of the application. An objective of appellant's invention is to provide an improved apparatus like that noted above requiring less maintenance. To that end, appellant's apparatus includes a registering means for registering a cumulative running value, such as the cumulative running time for each of the individual components of the entire animal related apparatus, and a control means adapted to generate a signal when a predetermined threshold value (e.g., maximum running time for a given component or for the entire apparatus) has been reached, so that service or maintenance can be timely performed for the given component or for the entire apparatus.

Appeal No. 2005-0710
Application 09/581,911

Independent claim 1 is representative of the subject matter on appeal and a copy of that claim can be found in the Appendix to appellant's brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Jakobson et al. (Jakobson)	4,508,058	Apr. 2, 1985
Finger	0 244 642	Nov. 11, 1987
(European patent application)		
Innings et al. (Innings)	WO 96/36212	Nov. 21, 1996

Claims 1 through 4 and 8 through 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jakobson in view of Finger.

Claims 5 through 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jakobson in view of Finger as applied above, and further in view of Innings.

Rather than reiterate the examiner's full statement of the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellant regarding those rejections, we make reference to the final rejection (Paper No. 15, mailed February

Appeal No. 2005-0710
Application 09/581,911

13, 2003) and substitute examiner's answer (Paper No. 24, mailed May 25, 2004) for the reasoning in support of the rejection, and to appellant's brief (Paper No. 17, filed August 12, 2003) and reply brief (Paper No. 20, filed December 8, 2003) for the arguments thereagainst. Appellant did not file a reply to the substitute examiner's answer mailed May 25, 2004.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we have made the determination that the examiner's final rejection of claims 1 through 10 under 35 U.S.C. § 103(a) will not be sustained. Our reasons follow.

In rejecting claims 1 through 4 and 8 through 10 under 35 U.S.C. § 103(a), the examiner has made certain findings with regard to the disclosures and teachings of Jakobson and Finger. More particularly, the examiner has indicated on page 2 of the final rejection that Jakobson discloses:

Appeal No. 2005-0710
Application 09/581,911

an animal related apparatus with a robot (Jakobson et al #8) for performing an animal relates operation, the robot being associated with a control means (Jakobson et al #5), at least one animal related device (#6) associated with the control means, the robot being provided with a robot arm (Jakobson et al #15) adapted to move the animal related device towards the animal, teat location device, teat cleaning device (Jakobson et al Fig. 6 #18), gate means (Jakobson et al #4). A registering means (Jakobson et al #14 and #18), a control means adapted to generate a signal (Jakobson et al Col. 6 line 27-28) when a predetermined threshold value has been reached.

In the examiner's view, the only thing lacking in Jakobson is any teaching or disclosure regarding a predetermined threshold value and a running value for each of the animal related device, the robot, and the complete related operation, as set forth in claim 1 on appeal. To address these deficiencies in Jakobson the examiner turns to Fingers, urging that this reference teaches that it is old and well known in the art of mechanical maintenance practices to monitor the total operating time of a machine or apparatus and to use that information to provide a basis for determining when the machine or apparatus should receive maintenance.

From the above-noted teachings of the applied prior art, the examiner has concluded that it would have been obvious to one of ordinary skill in the art at the time of appellant's invention

to modify the apparatus teachings of Jakobson et al with the maintenance practices of Finger since preventative maintenance procedures are well-known means of preventing unnecessary operational down time do [sic, due] to mechanical failures and to keep the system clean . . . (Finger col. 1) thus assuring reliability of a system.

In the brief (pages 4-6), appellant focuses on the examiner's findings with regard to Jakobson, contending that Jakobson does not disclose the recited "registering means . . . for registering a cumulative value" or the recited "control means . . . to generate a signal when a predetermined threshold value has been reached," as set forth claim 1 on appeal. More particularly, appellant points out that the examiner's finding that elements (14) and (18) of Jakobson are "registering means" like those of claim 1 on appeal, is in error, since those elements in Jakobson (col. 6, lines 10-40) are merely described as first and second proximity sensors utilized to, respectively, laterally and longitudinally position and vertically position the milking means (17) therein for attachment to the animal's teats, and have no disclosed capability of or need for registering a

Appeal No. 2005-0710
Application 09/581,911

cumulative running value. Regarding the "control means" of claim 1, appellant takes issue with the examiner's position in the final rejection that Jakobson (col. 6, lines 27-28) discloses a control means adapted to generate a signal when a predetermined threshold value has been reached, since the computer (5) mentioned in that portion of Jakobson is merely said to emit a signal that a cow positioned in the stall is to be milked, and is not described as providing a signal "when a predetermined threshold value has been reached," as required in claim 1 on appeal.

Having reviewed and evaluated the prior art relied upon by the examiner in the final rejection of independent claim 1, we find that we are in agreement with appellant that the examiner's above-noted findings concerning the teachings of Jakobson are in error. Moreover, we also note that we are at somewhat of a loss to understand exactly what the examiner's position is intended to be when "the apparatus teachings of Jakobson et al" are modified "with the maintenance practices of Finger," as contended in the final rejection and substitute answer. Is it the examiner's

Appeal No. 2005-0710
Application 09/581,911

intention to modify the proximity/position sensors (14, 18) pointed to in Jakobson or some other structure of that milking apparatus, and in exactly what manner based on the asserted "maintenance practices" of Finger?

In light of the foregoing, it is our determination that the examiner has not made out a *prima facie* case of obviousness with regard to the animal related apparatus set forth in appellant's claim 1 on appeal. Thus, the examiner's stated rejection of independent claim 1, and of claims 2 through 4 and 8 through 10 which depend therefrom, under 35 U.S.C. § 103(a) will not be sustained.

Regarding the examiner's rejection of claims 5 through 7 under 35 U.S.C. § 103(a) as being unpatentable over Jakobson in view of Finger as applied to claim 1 above, and further in view of Innings, we have reviewed the Innings reference, but find nothing therein which overcomes or provides for the deficiencies we have identified above with regard to the basic combination of Jakobson and Finger. Nor do we find anything in the examiner's final rejection that addresses the particular limitations in claims 5 through 7 on appeal regarding "said control means . . .

Appeal No. 2005-0710
Application 09/581,911

adapted to register the cumulative running value of said pulsator" (claim 5), or wherein the running value is either "running time of said pulsator" (claim 6) or "a number of pulsations generated by said pulsator" (claim 7). Accordingly, the examiner's rejection of dependent claims 5 through 7 under 35 U.S.C. § 103(a) will likewise not be sustained.

As for the examiner's assertions in the "Response to Argument" section of the original and substitute answers (Paper Nos. 18 and 24), we share appellant's view as set forth in the reply brief (Paper No. 20) that the examiner is attempting to substitute a newly formulated position and an impermissible new ground of rejection in the answer. We indicated as much in the Remand mailed March 9, 2004 (Paper No. 21), but the examiner chose not to address that issue in the substitute answer of May 25, 2004. Since it is clear to us that the position as expressed in the "Response to Argument" section of the original and substitute answers differ significantly from that articulated in the rejections set forth on pages 4-5 of the substitute answer, we have not considered that position in this appeal.

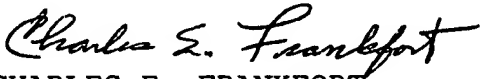
Appeal No. 2005-0710
Application 09/581,911


However, we remand the present application to the examiner for a full consideration of the teachings and suggestions to be fairly derived from Jakobson, Finger and Innings, and to consider making formal rejections of the claims now on appeal under 35 U.S.C. § 103(a). By re-opening the prosecution and making such a new set of rejections, appellant will be afforded due process and thus have a full and fair opportunity to adequately respond to the examiner's new position by way of amendment or argument. In any rejections under 35 U.S.C. § 103(a), the examiner should state the ground of rejection and point out where each of the specific limitations recited in the rejected claims is found in the prior art relied upon; identify any differences between the rejected claims and the prior art relied upon; and then explain how and why the claimed subject matter is rendered unpatentable over that prior art.

Appeal No. 2005-0710
Application 09/581,911

In light of the foregoing, the decision of the examiner to reject claims 1 through 10 of the present application under 35 U.S.C. § 103(a) is reversed.

REVERSED AND REMANDED


CHARLES E. FRANKFORT
Administrative Patent Judge


JOHN P. MCQUADE
Administrative Patent Judge


JENNIFER D. BAHR
Administrative Patent Judge

BOARD OF PATENT
APPEALS AND
INTERFERENCES

CEF:pgc

Appeal No. 2005-0710
Application 09/581,911

Young & Thompson
745 South 23rd Street 2nd Floor
Arlington, VA 22202